

I claim:

1. A method for labeling an object for one or more of its identification, authentication, or asset management, which comprises the steps of:
 - (a) creating on said object an algorithmic mark;
 - (b) associating with said algorithmic mark one or more of Raman spectral material, a biologic taggant, an optical taggant, or a spectral quantum dot (QD) by one or more of:
 - (1) incorporating in said algorithmic mark one or more of Raman spectral material, a biologic taggant, an optical taggant, or a spectral quantum dot (QD); or
 - (2) overcoating said algorithmic mark with a transparent coating containing one or more of Raman spectral material, a biologic taggant, an optical taggant, or a spectral quantum dot (QD).
2. The method of claim 1, wherein said biologic taggant is labeled with an optical taggant that one or more of emits selected detectable wavelengths of energy when exposed to infrared radiation (IR) or emits selected detectable wavelengths of energy when exposed to ultraviolet radiation (UV).
3. The method of claim 1, wherein said biologic marker is formed from encoded DNA bases.
4. The method of claim 2, wherein said IR taggant is an up-converting phosphor.
5. A method for labeling an object for one or more of its identification, authentication, or asset management, which comprises the steps of:
 - (a) creating on said object a pit and land code;
 - (b) overcoating said pit and land code with a coating containing one or more of Raman spectral material, an optical taggant, or a spectral quantum dot (QD).
6. The method of claim 5, wherein said coating additionally contains a biologic taggant.

7. The method of claim 7, wherein said biologic taggant is labeled with an optical taggant that one or more of emits selected detectable wavelengths of energy when exposed to infrared radiation (IR) or emits selected detectable wavelengths of energy when exposed to ultraviolet radiation (UV).
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8. The method of claim 6, wherein said biologic taggant is formed from encoded DNA bases.
9. The method of claim 7, wherein said IR agent is an up-converting phosphor.
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10. The method of claim 5, further comprising:
- (c) creating on said object an algorithmic mark;
 - (d) associating with said algorithmic mark one or more of Raman spectral material, a biologic taggant, an optical taggant, or a spectral quantum dot (QD) by one or more of:
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- (1) incorporating in said algorithmic mark one or more of Raman spectral material, a biologic taggant, an optical taggant, or a spectral quantum dot (QD); or
 - (2) overcoating said algorithmic mark with a transparent coating
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- containing one or more of Raman spectral material, a biologic taggant, an optical taggant, or a spectral quantum dot (QD).
11. The method of claim 10, wherein said biologic taggant is labeled with an optical taggant that one or more of emits selected detectable wavelengths of energy when exposed to infrared radiation (IR) or emits selected detectable wavelengths of energy when exposed to ultraviolet radiation (UV).
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12. The method of claim 10, wherein said optical taggant emits selected detectable wavelengths of energy when exposed to one or more of infrared radiation (IR) or ultraviolet radiation (UV).
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